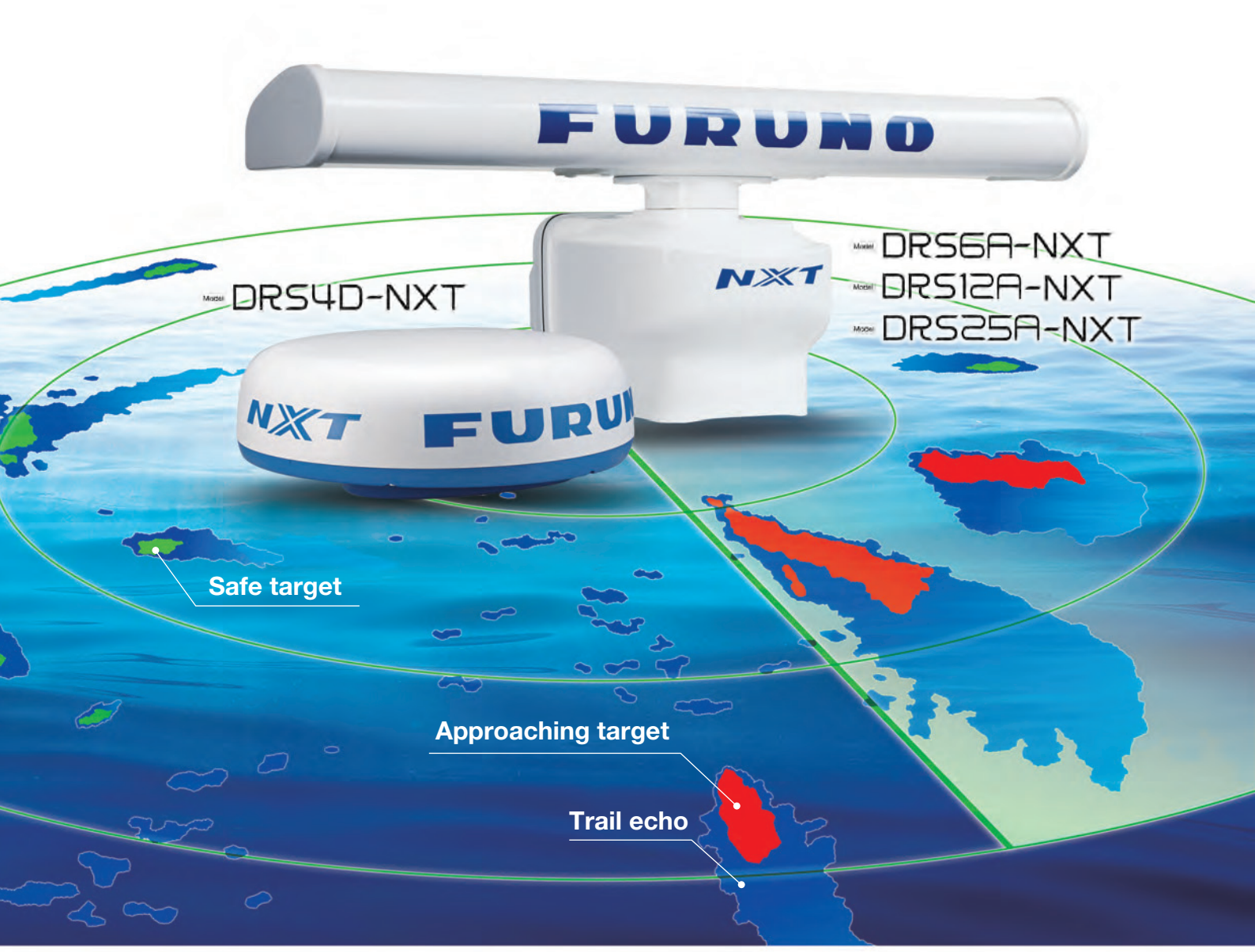
FURUNO

SOLID STATE DOPPLER RADAR

NXT SERIES



NAVnet Connect · Doppler · UHD Ultra High Definition · RezBoost · TARGET ANALYZER · AUTO · Target Tracking · Ethernet Plug&Play

More details on
www.furuno.com

The NXT chapter in Radar

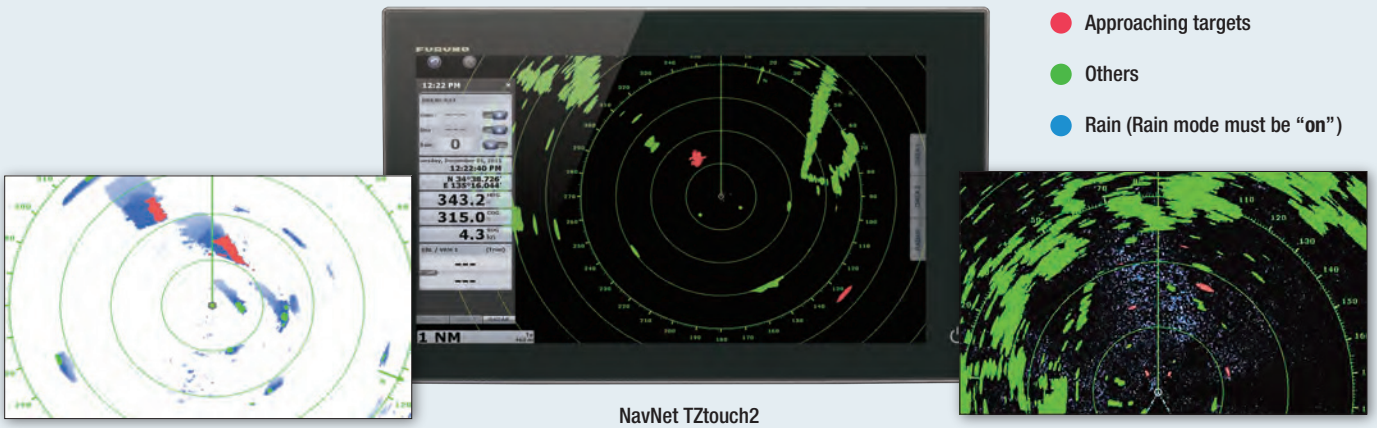


Model **DRS4D-NXT**

Radome type

Target Analyzer™ function utilizing Doppler technology spots hazardous targets instantly!

The NXT Radars are the first radars in the world to use FURUNO's exclusive Target Analyzer™ function. Targets that are approaching your vessel automatically change color to help you identify potentially dangerous targets. Green echoes are targets that stay stationary, or are moving away from you, while red echoes are hazardous targets that are moving towards your vessel. Echoes dynamically change colors as targets approach, or get farther away from your vessel. Target Analyzer™ improves situational awareness and can increase safety by showing you which targets to look out for. Additionnaly, when the rain mode is activated, rain echoes are shown in blue.This mode is particularly useful as it has the capability to detect targets masked by rain clutters.



Target Analyzer™ clearly shows hazardous targets in bright red (Echo trail activated)

NavNet TZtouch2
Approaching targets are displayed in red

When the rain mode is "on" rain echoes are shown in blue

- Solid-State pulse compression Doppler Radar
  No preheating time, low energy consumption (no use of a magnetron)
- Revolutionary Target Analyzer™ function instantly identifies hazardous targets
- Fast Target Tracking™ and Auto Target Acquire function, up to 100 targets
- RezBoost™ beam sharpening to increase the resolution
- Effective horizontal beam*
  Can reach a value of 0.7° with DRS6A-NXT (XN13A), and 2.0° with DRS4D-NXT (when using RezBoost™) *the lower the better
- Bird Mode to find the best fishing grounds by tracking birds
- Simple installation, no need to open the radome (DRS4D-NXT only), external PSU is not required
- New smart-connector cable for retrofitting existing DRS cable installations (DRS4D-NXT only)

technology !



Enhanced analytics and improved detection to keep your journey safe

Model DRS6A-NXT
Model DRS12A-NXT
Model DRS25A-NXT

Open array type

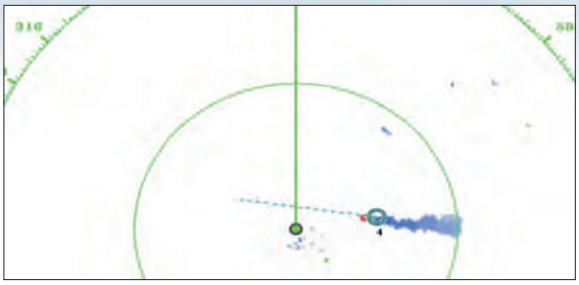
*3 antenna lengths : 3.5 ft (XN10A), 4 ft (XN12A), 6 ft (XN13A)

Fast Target Tracking™ and Auto Target Acquire function

With **Fast Target Tracking™** activated, it only takes a few seconds for a vector to be displayed once the target is selected, manually or automatically with the **Auto Target Acquire function**.

When the **Auto Target Acquire** function is **on**, approaching targets within 3NM range from own ship, which are potentially hazardous, are automatically acquired by Doppler calculation and will trigger an alarm*.

Together, Up to 100 targets can be acquired simultaneously, increasing considerably the safety and simplifying estimation of other vessel's course and speed.



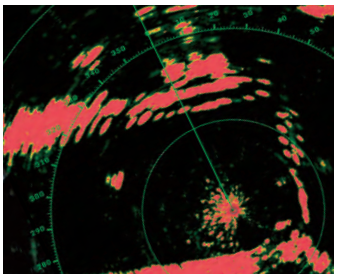
Approaching vessel with target vector and trail

*TCPA setting required

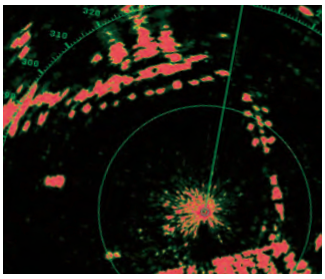
RezBoost™ beam sharpening

RezBoost

FURUNO's exclusive RezBoost™ technology has been incorporated into our Radar units for enhanced resolution and impressive performance.
With RezBoost™ set to MAX, the sharpness offers an incredibly detailed image with more targets and less clutter.
(the pictures show images captured by the DRS4D-NXT with Standard RezBoost™ and Max RezBoost™)

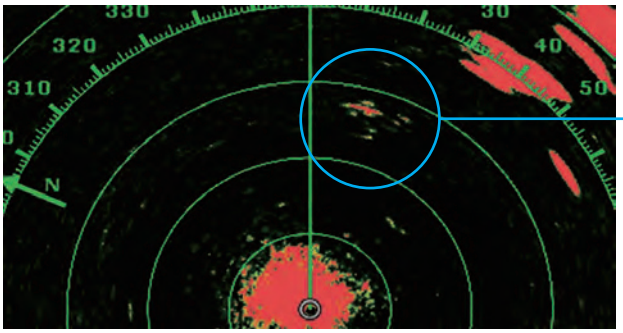


RezBoost™ standard (DRS4D-NXT)



RezBoost™ Enhanced, MAX setting (DRS4D-NXT)

Bird Mode



Bird echoes



Actual scene

NXT Radars feature a new Bird Mode that helps you identify birds gathering around schools of fish at the sea surface.The Bird Mode adjusts the gain and sea settings automatically for optimal visibility.

SPECIFICATIONS OF

Model DRS6A-NXT / Model DRS4D-NXT

ANTENNA



DRS6A/DRS12A/DRS25-NXT	Slotted waveguide array
Vertical beam width	22°
Horizontal beam width	2.3° (XN10A), 1.9° (XN12A), 1.4° (XN13A)
Antenna rotation speed	24/36/48 rpm range coupled or 24 rpm fixed



DRS4D-NXT	Radome (24")
Vertical beam width	25°(-3dB)
Horizontal beam width	3.9° (-3dB) Adjustable between 2.0° and 3.9° (effective with RezBoost control)
Antenna rotation speed	24/36/48 rpm range coupled or 24 rpm fixed (select)

RADAR FUNCTION

Output power	25 W (DRS4D-NXT) 100W (DRS12A-NXT) / 200W (DRS25A-NXT)
Tx frequency	3 channel, auto/manual selectable

Channel	P0N (MHz)	Q0N (MHz)
1	9380	9400
2	9400	9420
3	9420	9440

	DRS6A-NXT	DRS12A/DRS25A-NXT	DRS4D-NXT
Range Scales[NM]	0.0625-72	0.0625-96	0.0625-48
Pulse length(P0N)[us]	0.04-1.2	0.04-1.2	0.08-1.2
Pulse length(Q0N)[us]	5-48	5-48	5-18
PRR[Hz]	700-2000	700-2000	1100
Tx frequency[MHz]	9380-9440		

Minimum range	DRS6A/DRS12A/DRS25A-NXT: 10 m, DRS4D-NXT: 20 m
Range resolution	DRS6A/DRS12A/DRS25A-NXT: 10 m, DRS4D-NXT: 20 m
Range accuracy	1% of range in use or 10 m, whichever is the greater
Bearing accuracy	±1°

INTERFACE

Number of ports	LAN: 1 port, Ethernet, 100Base-TX, RJ45
Data sentences	IEC61162-1/2
Input	GGA, GLL, GNS, HDG, HDM, HDT, RMA, RMC, THS, VHW, VTG

POWER SUPPLY

DRS6A/DRS12A/DRS25A-NXT: 12/24 VDC: 9.5/5.0 A max.
DRS4D-NXT: 12-24 VDC: 2.5-1.3 A

ENVIRONMENT

Ambient temperature	-25 °C to +55 °C (storage: -30 °C to +70 °C)
Relative humidity	DRS6A/DRS12A/DRS25A-NXT: 95% or less at +40 °C DRS4D-NXT: 93% or less at +40 °C
Degree of protection	DRS6A/DRS12A/DRS25A-NXT: IP56 DRS4D-NXT: IP26
Vibration	IEC 60945 Ed.4

EQUIPMENT LIST

DRS6A-NXT/DRS12A-NXT/DRS25A-NXT

Standard	Scanner Unit (RSB-137-119), Radiator, Installation Materials, Spare Parts
Option	LAN cable 2/5/10 m, Joint Box (TL-CAT-012)

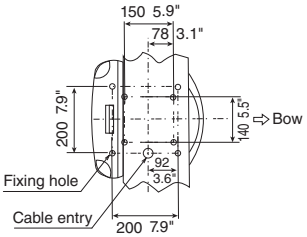
DRS4D-NXT

Standard	Radar Sensor (RSB-135-115), Installation Materials, Spare Parts
Option	Radome Mount (OP03-208), (OP03-239)LAN cable 2/5/10 m, Joint Box (TL-CAT-012)

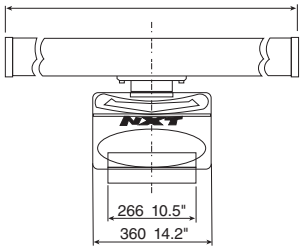
Antenna Unit

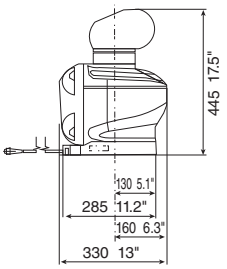
DRS6A/DRS12A/DRS25A-NXT
XN10A 20 kg 44.1 lb
XN12A 21 kg 46.3 lb
XN13A 23 kg 50.7 lb

3.5 ft Open Array NXT Radar 22 kg 48.5 lb
4 ft Open Array NXT Radar 25 kg 55.1 lb
6 ft Open Array NXT Radar 27 kg 59.5 lb

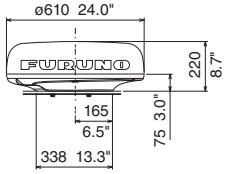


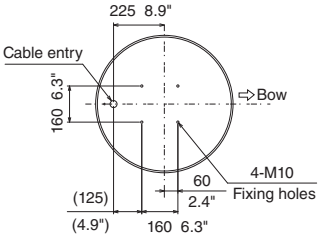
XN10A 1036 40.8"
XN12A 1255 49.4"
XN13A 1795 70.7"



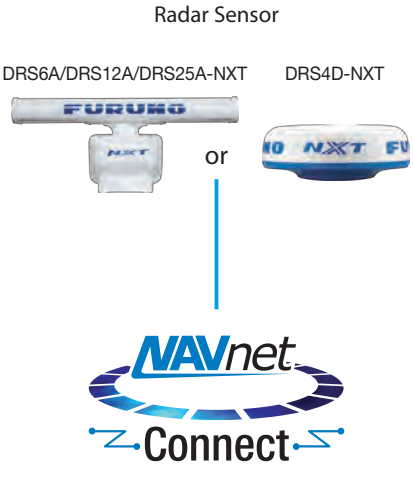


DRS4D-NXT
7.3 kg 16.1 lb





Interconnection Diagram



DRS12A-/DRS25A-NXT compatible software version: 6.0.1/6.21 or later (TZT/TZT2)
DRS6A-NXT compatible software version: 5.0.1 or later (TZT/TZT2)
DRS4D-NXT compatible software version: 4.2.1 (TZT), 3.0.1 (TZT2) or later

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1-C-20103LB
Catalogue No. CA000001410